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JOINT COMMITTEE OF
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AND
IUPAC COMMISSION ON FOOD\*

## LEXICON OF LIPID NUTRITION

(IUPAC Technical Report)

Prepared for publication by J. BEARE-ROGERS<sup>1</sup>, A. DIEFFENBACHER<sup>2,†</sup>, AND J. V. HOLM<sup>3</sup>

<sup>1</sup>41 Okanagan Drive, Nepean, Ontario K2H 7E9, Canada; <sup>2</sup>Chemin de la Tour Ronde 2, CH-1806 St. Légier, Switzerland; <sup>3</sup>Danisco Ingredients, Edwin Rahrsvej 38, DK-Braband, Denmark

With contributions from: D. Boskou (Greece); A. Dieffenbacher (Switzerland); J. Dupont (USA); Ghafoorunissa (India); F. Gunstone (UK); J. V. Holm (Denmark); G. Hølmer (Denmark); R. Lago (Brazil); Ö. Levin (Sweden); T. Kaneda (Japan); M. Pike (UK); G. Rocquelin (France); A. J. Vergroesen (Austria); A. Visapää (Finland); F. Weber (Switzerland); Coordinator: J. Beare-Rogers (Canada).

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<sup>\*</sup>Formerly Commission on Oils, Fats, and Derivatives †Corresponding author

## **COMMENTS ON THE TABLES**

For Tables 4 and 5, the authors have consulted the following references for the listed figures:

USDA: Official Standards of the U.S. Department of Agriculture

Codex: Codex Alimentarius: Alinorm 95/17

Reference [1]: A. Karleskind and J. P. Wolff (Eds.). Manuel des Corps Gras, TEC-Lavoisier, Paris (1992).

Table 4 Fatty acid composition of oils and fats of vegetable sources (expressed as percentage mass-fraction of total fatty acids).

Almond oil   Avocado oil   Babasu fat   Canola oil   Canola oil   Canola oil   Canola oil   Canola oil   Dutter   Coconut oil   Com (maize)   Cottonsed   Catola oil   Canola oil   Catola oil   Catol		•		)	·	,				
1.2-7.6 40.0-55.0 0.1 44.6 00-0.3 0.0-0.3 0.6 44.6 00-0.3 00-0.4* 00-0		Almond oil	Avocado oil	Babassu fat	Canola oil	Cashew nut oil	Cocoa	Coconut oil	Com (maize) oil	Cottonseed oil
0.6 4.6 11.0-27.0 0.1 16.8 0.0-0.4*  0.8 10.0 0.1 0.1 0.0 0.0.0.4*  0.8 10.0 0.1 0.1 0.0 0.0-0.4*  0.9 0.0-0.4*  0.1 0.2 0.1.5*  0.2 0.4 0.2 0.2 0.4*  0.6 0.2 0.2 0.4*  0.7 0.2 0.4 0.2 0.4  0.8 0.0 0.0 0.0 0.0  0.9 0.0 0.0 0.0 0.0  0.0 0.0 0.0 0.0 0.0  0.0 0.0	C10:0			1.2-7.6			-	6.0	600	<0.0>
0.6 4.6 0.2* 0.0-0.4*  0.8 10.0 0.1 0.5-1.5*  0.8 0.0-0.4*  0.8 0.2-0.4*  0.0 0.1 0.2-0.4*  0.0 0.2-	C12:0 C14:0			11.0-27.0			0.1	16.8	0.0-0.3	0.6-1.0
6.5 17.2 5.2-11.0 4.0 4-6 25.4 8.2 8.6-16.5 17.4 13.1 1.4-6.8* 26.0 8.7 Codex	C16:1 n-7	9.0	4.6				0.2*		0.0-0.4*	<1.2
6.5 17.2 5.2-11.0 4.0 4-6 25.4 8.2 8.6-16.5 6.5 1.74 1.3.1 1.4-6.6* Codex Codex Codex 1.8D 4.0 1.00 0.1 1.00 0.	C17:0									
0.8 10.0 0.1 0.5-1.5* 0.3-0.7 0.2-0.4* 0.3-0.7 0.2-0.4* 0.3-0.7 0.2-0.4* 0.2-0.4* 0.2-0.4* 0.2-0.4* 0.2-0.4* 0.2-0.4* 0.2-0.4* 0.2-0.4* 0.2-0.4* 0.2-0.1* 0.2-0.4* 0.2-0.1* 0.2-0.1* 0.2-0.1* 0.2-0.1* 0.2-0.2* 0.	C17:1									
6.5 17.2 5.2–11.0 4.0 4-6 25.4 8.2 8.6–16.5 6.6 64.0 9.0–20.0**  6.6 64.0 9.0–20.0**  6.7 17.4 13.1 1.4–6.**  6.8 0.04  6.9 0.05  6.0 0.05  6.0 0.05  6.0 0.05  6.0 0.05  6.0 0.05  6.0 0.05  6.0 0.05  6.0 0.05  6.0 0.05  6.0 0.05  6.0 0.05  6.0 0.05  6.0 0.05  6.0 0.	C18:3 n-3		8.0		10.0		0.1		0.5-1.5*	<b>~0.4</b>
6.5 17.2 5.2–11.0 4.0 4–6 25.4 8.2 8.6–16.5 43.1 1.4–6.6* 26.0 68–75 2.8 2.00–42.2* Codex Codex Codex 6.5 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0	C20:0								0.3-0.7	0.2-0.5
40.5 40.5 40.1*  2.6-7.3 6.5 17.2 5.2-11.0 4.0 4-6 25.4 8.2 8.6-16.5 1.7 0.2 1.8-7.4 2.0 6-12 33.2 2.8 4.3.3 69.6 64.0 9.0-20.0* 56.0 68-75 32.6 5.8 20.0-42.2* 17.4 13.1 1.4-6.* 26.0 7-22 2.8 1.8 39.4-65.6* USDA USDA Codex Codex Codex Codex	C20:1 n-9								0.2-0.4*	<0.1*
6.5 17.2 2.6-7.3 6.5 17.2 5.2-11.0 4.0 4-6 25.4 8.2 8.6-16.5 6.6 64.0 9.0-20.0* 56.0 68-75 32.6 5.8 20.0-42.2* 17.4 13.1 1.4-6.6* 26.0 7-22 2.8 1.8 39.4-65.6* USDA Codex Codex Codex Codex Codex	C20:2 n-6									
40.5 (2.0 (2.1*)  2.6-7.3 (2.0)  6.5 17.2 5.2-11.0 4.0 4-6 25.4 8.2 8.6-16.5  1.7 0.2 1.8-7.4 2.0 6-12 33.2 2.8 (3.3 (2.0-42.2*)  6.6 64.0 9.0-20.0* 56.0 68-75 32.6 5.8 20.0-42.2*  17.4 13.1 1.4-6.6* 26.0 7-22 2.8 1.8 39.4-65.6*  USDA USDA Codex Codex Codex Codex	C20:4 n-6								,	,
42.0 40.1*  2.6-7.3 6.5 17.2 5.2-11.0 4.0 4-6 25.4 8.2 8.6-16.5 1.7 0.2 1.8-7.4 2.0 6-12 33.2 2.8 <3.3 69.6 64.0 9.0-20.0* 56.0 68-75 32.6 5.8 20.0-42.2* 17.4 13.1 1.4-6.4* 26.0 7-22 2.8 1.8 39.4-65.6* USDA Codex Codex Codex Codex	C22:0								<0.5	0.0° د و و
6.5 17.2 5.2–11.0 4.0 4–6 25.4 8.2 8.6–16.5 7.5 7.5 7.5 7.5 8.2–10.0* 5.0 6–12 33.2 2.8 <3.3 6.0 64.0 9.0–20.0* 56.0 68–75 32.6 5.8 20.0–42.2* 17.4 13.1 1.4–6.4* 26.0 7–22 2.8 1.8 39.4–65.6* Codex Codex Codex	C22:1 n-9				2.0				<0.1*	<0.3*
6.5 17.2 5.2–11.0 4.0 4–6 25.4 8.2 8.6–16.5 7.5 7.5 7.5 7.5 8.0 64.0 9.0–20.0* 56.0 68–75 32.6 5.8 20.0–42.2* 17.4 13.1 1.4–6.4* 26.0 7–22 2.8 1.8 39.4–65.6* 15.0 15.4 13.1 1.4–6.4* 26.0 7–22 2.8 1.8 39.4–65.6* 15.4 15.0 15.4 15.6 15.4 15.4 15.6 15.4 15.4 15.4 15.4 15.4 15.4 15.4 15.4	C22:2 n-6								•	*1.0 }
6.5       17.2       5.2–11.0       4.0       4–6       25.4       8.2       8.6–16.5         1.7       0.2       1.8–7.4       2.0       6–12       33.2       2.8       8.6–16.5         69.6       64.0       9.0–20.0*       56.0       68–75       32.6       5.8       20.0–42.2*         17.4       13.1       1.4–6.6*       26.0       7–22       2.8       1.8       39.4–65.6*         USDA       Codex       Codex       Codex       Codex       Codex	C24:0								<0.4	<0.1
6.5 17.2 5.2–11.0 4.0 4–6 25.4 8.2 8.6–16.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7	C24:1 n-9							•		
2.6-7.3 6.5 17.2 5.2-11.0 4.0 4-6 25.4 8.2 8.6-16.5 1.7 0.2 1.8-7.4 2.0 6-12 33.2 2.8 <3.3 69.6 64.0 9.0-20.0* 56.0 68-75 32.6 5.8 20.0-42.2* 17.4 13.1 1.4-6.6* 26.0 7-22 2.8 1.8 39.4-65.6* USDA Codex Codex Codex Codex	C6:0							0.6		
6.5 17.2 5.2–11.0 4.0 4–6 25.4 8.2 8.6–16.5 1.7 0.2 1.8–7.4 2.0 6–12 33.2 2.8 <3.3 69.6 64.0 9.0–20.0* 56.0 68–75 32.6 5.8 20.0–42.2* 17.4 13.1 1.4–6.6* 26.0 7–22 2.8 1.8 39.4–65.6* USDA Codex Codex Codex Codex	C8:0			2.6-7.3				c./	•	, , ,
1.7 0.2 1.8-7.4 2.0 6-12 33.2 2.8 <3.3 69.6 64.0 9.0-20.0* 56.0 68-75 32.6 5.8 20.0-42.2* 17.4 13.1 1.4-6.6* 26.0 7-22 2.8 1.8 39.4-65.6* USDA Codex Codex Codex Codex	C16:0	6.5	17.2	5.2-11.0	4.0	4	25.4	8.2	8.6–16.5	21.4–26.4
69.6 64.0 9.0-20.0* 56.0 68-75 32.6 5.8 20.0-42.2* 17.4 13.1 14-6.6* 26.0 7-22 2.8 1.8 39.4-65.6* USDA Codex Codex Codex Codex	C18:0	1.7	0.2	1.8–7.4	2.0	6-12	33.2	2.8	<b>3.3</b>	2.1–3.3
17.4 13.1 1.4-6.6* 26.0 7-22 2.8 1.8 39.4-65.6* USDA USDA Codex Codex Codex Codex	C18:1 n-9	9.69	64.0	9.0-20.0*	56.0	68-75	32.6	5.8	20.0-42.2*	14.7–21.7
USDA USDA Codex Codex Codex Codex	C18:2 n-6	17.4	13.1	1.4-6.6*	26.0	7–22	2.8	1.8	39.4-65.6*	46.7–58.2
	Source	USDA	USDA	Codex	Codex	Codex		Codex	Codex	Codex

\*Exact position of double bond not available.

(continued on next page)

Table 4 (cont'd.) Fatty acid composition of oils and fats of vegetable sources (expressed as percentage mass-fraction of total fatty acids).

	Palm oil	Palm olein	Palm stearin	Peanut oil	Pecan nut oil	Pistachio nut oil	Poppyseed oil	Rapeseed oil	Rapeseed oil (low erucic acid)
C6:0									
C8:0									
C10:0									
212:0	4.0≻	0.1-0.5	0.1-0.4	0.0-0.1					
214:0	0.5-2.0	0.9-1.4	1.1-1.8	0.0-0.1		0.3		0.2	<0.2
216:0	40.1-47.5	38.2-42.9	48.4-73.8	8.3-14.0	6.4	11.6	10.6	1.5-6.0	3.3-6.0
316:1 n-7	*9.0>	0.1-0.3*	>0.2*	<0.2*	0.5	9.0		<3.0*	0.1-0.6*
317:0									<0.3
317:1									<0.3
218:0	3.5-6.0	3.7-4.8	3.9–5.6	1.9-4.4	1.6	1.4	2.9	0.5-3.1	1.1–2.5
318:1 n-9	36.0-44.0*	39.8-43.9*	15.6-36.0*	36.4-67.1*	49	69.3	19.7	*09-8	52.0-66.9*
318:2 n-6	6.5-12.0*	10.4-13.4*	3.2-9.8*	14.0-43.0*	24.8	15.2	62.4	11–23*	16.1-24.8
318:3 n-3	<0.5*	0.1-0.6*	0.1-0.6*	<0.1*	1.1	0.5		5-13*	6.4-14.1
320:0	<1.0	0.2-0.6	0.3-0.6	1.1–1.7				3.0	0.2-0.8
320:1 n-9				0.7-1.7	0.7	0.5		3–15	0.1 - 3.4
220:2 n-6								<1.0	<0.1
320:4 n-6									
322:0				2.1–4.4				<2.0	<0.5
222:1 n-9		~		<0.3*				260*	<2.0*
22:2 n-6		,						<2.0*	<2.0*
24:0				1.1–2.2				<2.0	<2.0
24.1 n-9				<0.3*				*0.€	<0.4*
Source	Codex	Codex	Codex	Codex	USDA	USDA	USDA	Codex	Codex

\*Exact position of double bond not available.

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